IT Competence for all:

Propel your staff to new heights

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IT Competence for all: Propel your staff to new heights

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ABSTRACT

In 2005, the University of Minnesota Libraries charged a task force with the development of a list of core information technology (IT) skills that could be expected of all 300 staff, from technical services to reference services to stacks maintenance. Once this list was developed, the task force designed and administered an online self-assessment survey to identify gaps and patterns in staff computer skills. Both the development of the core competencies and the administration of the assessment are discussed. Also provided are recommendations for next steps, including using assessment reports and data gathered in the process to develop a training and professional development curriculum focused on the specific identified training needs of staff.

Keywords (3-10)
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Introduction

Computer use is pervasive throughout all areas of library work, from public services where proficiency with online databases and knowledge of all features of the Web are expected, to technical services where integrated library systems and bibliographic utilities are at the core of acquisitions and cataloging activities. All of these systems are updated and replaced with regular frequency, and learning new or upgraded online resources must be an integral part of every library position. Staff are expected to keep up, but are they provided with the support structure to do so? And can we assume that all staff have a basic set of core computer competencies from which to launch into the world of Web 2.0?

At the University of Minnesota—Twin Cities campus, the University Libraries set out to determine how best to enable over 300 staff to develop their information technology knowledge and skills and thereby increase their effective use of personal computers and computer applications. A task force (the Staff Development Framework group, SDF) consisting of staff from a wide range of functional areas was established to evaluate the staff training program already in place, to develop a set of core computer competencies, to assess training needs in the area of information technology, and to recommend new ways to provide an expanded education program. Ultimately, with a new computer education program in place, staff would be expected to utilize all relevant features of key software applications, troubleshoot their personal computers when problems occurred, and position themselves to take advantage of emerging technologies. Expected outcomes included a suite of educational programs tailored to *identified*, rather than perceived needs; increased confidence among staff who are provided with the tools they need to succeed; redirected use of computer support staff who would spend less time answering

repetitive, low-level requests for assistance; and an explicit connection between identified training needs and performance goals and standards.

As the task force began to address its charge, it focused on identifying computer competencies and sought to answer the following questions. Are there core computer competencies that should be expected of all 300 staff, from technical services to reference services to stacks maintenance? And if so, to what extent do staff currently possess those skills? Are staff aware that supervisors expect that they possess specific computer competencies for their positions? And do supervisors know the proficiency levels of their staff? The task force realized that it needed to raise awareness and gain acceptance among staff about the development of core computer competencies that would form the basis for an expanded training program. And then, once a list of core skills was identified and agreed upon, the task force would administer an online self-assessment to staff in order to gauge their computer proficiency, identify areas for immediate training, and help staff and supervisors set developmental goals for the coming year. This article focuses on staff participation in the development of a core set of information technology competencies and the implementation of an online self-assessment tool provided by *New Horizons Computer Learning Centers,* which offered a snapshot of staff proficiency levels (New Horizons Computer Learning Centers).

Review of the Literature

As the Web gained prominence in the 1990's, libraries recognized the need for an increased emphasis on computer training. In 1994, Margaret Lippert noted that it was possible for librarians to function without an understanding of the computers they used. In addition, she

described how the gradual presence of the Internet on campus was not accompanied by training programs and manuals. Instead, early adopters were self-taught, and others learned what they needed know to get by (Lippert 1994). In 1998, Dan Marmion asserted that preparing library employees to use technology was one of the profession's greatest challenges (Marmion 1998). Theresa Kirkpatrick underscored that point by surveying a range of academic libraries in Minnesota to assess their computer training practices (Kirkpatrick 1998). Over the ensuing ten plus years, numerous articles have outlined a list of computer competencies and described the design of technology training programs to address the need for staff to use computers effectively and efficiently (Childers 2003; Cuddy and Medeiros 2002; Fidishun 2001; Jennings 2005; Krissoff and Konrad 1998; Lippert 1994; Mozenter, Sanders, and Bellamy 2003). Many of these articles note the need to strengthen staff computer skills in order to strengthen the assistance that they provide the public, rather than focusing on skills that *all* library staff should possess, regardless of their level of public interaction.

A number of articles also address how library staff may perceive the implementation of computer competencies and new training programs. Dolores Fidishun discusses two types of reference librarian and their openness to learning new technologies (Fidishun 2001). In addition, Cuddy and Madeiros describe staff reactions when their performance was observed in order to identify training needs (Cuddy and Medeiros 2002). It is extremely important that staff understand that the purpose of a needs assessment is to develop an educational program that *supports* them and enables them to be successful. It should always be emphasized that an initial needs assessment is not an evaluation of performance, and every effort should be made to inform staff about the development of competencies, gather their feedback on early drafts, and garner their support.

Many of these articles mention the importance of assessing training needs through a variety of means, including the review of helpdesk logs, job analyses, staff interviews, observation of work environments, and self-assessments. Judith Brown provides a thorough discussion of why a needs assessment is essential to the success of a training program and outlines the various methods that a trainer may employ (Brown 2002). In addition, other articles feature online assessments, especially in the private sector. For example, Karen Price describes an online tool called "e-skills Passport" to identify gaps between the IT skills employers want their staff to possess and their actual skill levels (Price 2006; e-skills UK). Paul Harris provides an overview of two others: the GeoMaestro learning management program and LearnCenter LMS-LCMS (GeoLearning ; Harris 2005; Learn.com). In this article, we describe the University of Minnesota's use of the SMART online tool from *New Horizons* (New Horizons Computer Learning Centers).

Methodology

A large component of the SDF group's charge was to gather data about existing staff competency levels that could be used to inform the development of a new training curriculum. This data is critical for identifying precisely where competency gaps exist, information that will result in the design of a focused training curriculum that will effectively address those gaps. This section discusses all of the steps followed to define and gather the data needed, from the establishment of a baseline of core computer or IT competencies, through the self-assessment process and up to the identification of staff IT competency gaps.

Core Competencies

The first task was to establish a baseline of "Core IT Competencies" that all Libraries staff, regardless of their work specialty or area (e.g., reference, technical services, circulation), could reasonably be expected to possess or attain. Compiling that list was a lengthy process involving staff throughout the Libraries. First, IT support staff developed a first draft list by documenting what software was currently installed on staff desktops (Appendix A). The University Libraries is a MS Windows environment and the number of "images" installed on desktops is relatively limited, so this was a fairly broad-brush representation. With over 300 full time staff, some of whom have software purchased specifically for an individual project or specific function, the list is not 100% comprehensive but it does accurately represent the software present on the majority of the computers in the Libraries. The list included "Standard" software such as operating systems (e.g., Windows XP Professional), connection managers (e.g., Novell Client), and applications software (e.g., Adobe Reader, MS Office, Real Player). It also included optional software provided on an "as needed" basis (Cataloger's Desktop), and software which was not normally purchased with central computing funds (Adobe Photoshop, Dreamweaver), but that would be supported by IT staff if acquired by a functional department.

Validation of Core Competencies List

After the SDF group reviewed the draft list and suggested changes, it was time for staff validation and input. The first step in this validation process was to assign representatives from the SDF group to meet with existing Libraries committees or working groups representing every functional area in the Libraries, from technical services to reference to facilities management, to gather their feedback on the draft list of core competencies. Obtaining staff buy-in was a critical part of the process that would have been damaged by the creation or imposition of a list of skills that appeared threatening or overwhelming. The skills assessment process designed to measure

these core competencies would only be successful with a high degree of voluntary participation from all staff. It was important to convey the message that this initiative was intended to help staff members feel more competent and confident in their abilities, not to force them to do or learn things they did not believe important to be successful and effective in their work. Clearly the only people who could accurately describe what IT skills were essential for their particular job function, were staff members performing those tasks on a daily basis. Approximately 80 staff members were consulted in this phase and provided invaluable feedback that was used to revise the competencies list, documenting some additional computer software needs and eliminating others.

Finally, we conducted an online survey of all staff to confirm the validity of the revised list of competencies. The survey was created using Zoomerang™, a program that is relatively easy to program and provides useful "canned" statistics and reports for analyzing results. To design the questions, the SDF group expanded upon each item in the core competency list, defining for each a specific set of skills or competencies that was not limited to software or hardware but included simple functional skills as well. Staff were asked to indicate their level of agreement about the importance of each skill to their job. In Figure 1, for instance, 92% either agree or strongly agree that they should be expected to be competent in this skill set.

Figure 1

31.	Use UMCal Examples: start UMCal, use the in-tray to accept or decline meetings, create a simple or recurring meeting or event, propose a meeting, check for conflicts, group agendas, suggest a date	Number of Responses	Response Ratio
Strongly Disagree		4	2%
Disagree		9	6%
Agree		48	29%
Strongly Agree		102	63%
	Total	163	100%

The response rate for the survey was 52% (165 out of 318 staff) and overall, the survey results confirmed the validity of the list, with the majority of respondents agreeing that the skills listed were important or very important to their jobs.

The final IT Core Competency list included the following categories and skills:

- **Desktop**: Workstation use, system information, MS Windows, laptops
- **File Management**: Tools, directories, folders, file backup, recycle bin
- **Navigation**: Applications (opening & closing), mouse, window management, keyboard navigation
- **Printing**: Printing documents, multiple/network printers, monitoring print jobs, printer maintenance
- **MS Office 2003 Baseline**: Create, open, save, format, print, and share Word, Excel, and PowerPoint documents
- **E-Mail**: Login, message management, signatures, directory, Address Book, attachments, folder and file management (filters, trash, finding, sorting), account management (autoreply, listservs), security (spam, blocking)
- **Web Browsers**: Familiarity with different browsers, pdf file use, preferences (pop-ups, cookies), cache, bookmarks

- **UMCal (Calendaring):** Accept, decline, propose, edit, delete, create recurring meetings; manage group meetings; customize settings
- **Troubleshooting**: Reboot, printer recycling, cable connections, Task Manager, Help Desk
- **Local Network**: Passwords, access to networked drives, management of files on network

Assessment

After developing a final core IT competencies list, the SDF group began thinking about the development of a training curriculum that would support staff and help them acquire those competencies. The first step would be to assess or measure the skill levels staff currently possessed in each skill, in order to define what skills they needed to acquire. This involved finding or creating an assessment tool that would provide enough information to delineate or show the specific gaps between the core competencies desired and existing staff competency levels. Therefore, the next major step in the process was to assess existing or current staff competency levels in each core area, to identify gaps and patterns in staff IT skills. This evaluation would enable Human Resources staff to determine which skill sets to focus on in future initiatives to design a new training curriculum and provide needs-related staff professional development opportunities.

The SDF group debated whether to develop a testing tool in-house, or purchase a service or existing assessment software and adapt it to match local needs. Developing an assessment tool in-house was not considered a feasible or cost-effective option due to existing skill sets or expertise, and limitations on programming staff time. While investigating options, the group was

briefed on a self-assessment tool and process that had been used successfully elsewhere at the University of Minnesota, offered by *New Horizons© Computer Learning Centers* (http://www.newhorizons.com/content/index.aspx). In initial discussions with *New Horizons of Minnesota*, we were assured that the Skills Measurement, Assessment, and Resource Tool (*SMART)* (New Horizons Computer Learning Centers) offered by this vendor could be customized to include the competency list we had already developed, and determined this would be a cost-effective alternative to creating a similar tool in-house.

The group particularly liked the fact that this is an online self-assessment tool, and is therefore a much more user-friendly option for staff than an actual test. This assuaged concerns that if we "tested" staff skill levels, it could negatively impact staff attitudes from the outset. We worked hard to promote an understanding of the reasons for the initiative, assuring staff that the primary goal was to ensure that they possess IT skill levels that will enable them to succeed and excel in their professional life. A staff wiki was devoted to the Staff Development Framework initiative and was used as a place for all staff to see our charter, meeting minutes, and other documentation. These strong communication efforts, combined with the user-friendly idea of self-assessment versus testing, contributed greatly to the success of the assessment process. Although some project members wondered what level of accuracy could be expected of users self-assessing their own skills, *New Horizons* staff eased these concerns by noting that in their experience most users assess themselves fairly and may actually exhibit more of a tendency to under-rate their skill levels rather than inflate them.

After identifying *New Horizons* as the vendor for the self-assessment process, we worked through the intense pre-assessment process required to set up and use the *SMART* online assessment tool. Since approximately 300 Libraries staff members would be asked to self-assess their IT skills using this tool, the process was somewhat complicated. The full process involves four distinct phases: Definition, Validation, Assessment, and Solution.

Definition Phase

This initial phase in the process was the most intense and time-consuming. First we had to determine which skills would be included in the assessment, working with *New Horizons* to develop this specific set of IT skills based on the Core Competencies list we had developed. We then designed for each competency or "skill set" a question or set of questions (e.g., Email use involved five questions) that would assess each users' level of comfort with specific skills associated with that competency. *New Horizons* offered a wide range of questions for relatively standard systems or software, so we chose those that were applicable (e.g., Windows OS, MS Word). We then created 12 of our own custom skill questions, and *New Horizons* staff loaded all questions into our customized SMART module.

After designing the skill sets, "roles" had to be designed to which each staff member would be assigned. A role can be thought of as a container of skills, and we chose four possible roles (*New Horizons* offers a maximum of six) for Libraries staff: Core, Intermediate Desktop, Advanced Desktop, and IT Support. Role definitions are as follows:

Core: Individuals in this role need just the core competencies required of all Libraries staff. Eighty-two library assistants who do not extensively use software were assigned to this role, with 56 skills to be assessed.

Intermediate Desktop: Individuals in this role create or edit documents, spreadsheets, presentations, and/or web sites, and thus need the core competencies plus some additional software skills. The majority of library staff were assigned to this role, including 208 librarians, managers, IT staff, and other heavy software users, with 146 skills assessed.

Advanced Desktop: This role was created for staff members who might fill a new position that was being considered by the Libraries, IT Peer Consultants. Peer consultants would be regular staff who possessed some type of in-depth computer knowledge that they could share with colleagues in their unit. Peer Consultants should be more knowledgeable in the core competencies than staff in Core or Intermediate Desktop roles, since they would be assigned to train or support others in these competencies. They would also need some of the additional software skills covered in Intermediate Desktop. Since Peer Consultants had not yet been selected, no one was initially mapped to this role; it was established to be used for self-assessing interested Peer Consultants at a future date[1].

IT Support: This role was reserved for IT help desk/support staff, or for future Peer Consultants with optional advanced duties. IT support staff supervisors determined skill requirements for this role. Like Advanced Desktop/Peer Consultants, these individuals must be more knowledgeable in the core competencies than those in Core or Intermediate Desktop roles. They also must have the additional Intermediate Desktop software skills, as well as higher level IT

[1] A subsequent pilot Peer Consultant program was successful; however, the program was not feasible on a Libraries-wide basis due to staffing considerations.

skills specific to IT support. Staff in this role were assessed on the greatest number of skills (193), with 12 primary IT support staff mapped to the role.

Validation Phase

SDF group members completed the customization of the assessment tool by "validating" every one of the skill sets online in SMART, ensuring that the questions for each role matched the skills and roles defined for the Libraries. This involved removing some skill sets from some roles and editing skills or questions in others. The result was that staff in different roles were asked to assess their familiarity with a different number of skill sets, as specified in each role definition above.

Then, for each of the four roles we set a goal competency or knowledge level for every skill within each skill set. For example, for all skills comprising the set for the University's online calendaring tool (UMCal, one of the core competencies), the goal for staff in *Core* and *Intermediate Desktop* roles was to be competent, and the goal for those in *Advanced Desktop* and *IT Support* roles was to be expert. The goal level is not necessarily the same for all skills within a single skill set. A good example is the use of MS Office PowerPoint for those in the *Intermediate Desktop* role. While a goal of competent might be set for basic PowerPoint skills such as opening a presentation, a goal of only aware might be set for a specialized skill such as using PowerPoint animation. Choosing a goal of no skill required for a specific skill set within a role resulted in the actual deletion of that skill from that role's assessment.

The final task in this phase was to map or assign every Libraries staff member to one of the four roles. A small working group obtained a definitive list of staff members and their supervisors from Libraries Human Resources, and assigned an initial role designation to each staff member. Supervisors were then provided with a list of their staff members and preliminary role assignments, and were asked to make the final role assignments based on their knowledge of each individual and their work environment. Finally, *New Horizons* loaded all of this information into the *SMART* tool, and it was time to deliver the assessment.

Assessment Phase

As noted, the success of the entire project was dependent upon excellent communication with staff, and this was especially critical as it came time for staff to actually take the assessment. During the Validation process, several communications were distributed to all staff via the Libraries weekly internal newsletter to inform them of the goals of the project and keep them apprised of progress. The SMART assessment was then announced, with instructions, a link to the assessment, and a general time frame for how long it might take to complete for each role. The assessment could be taken anytime between December 14, 2005, and January 6, 2006. During that period email and weekly staff newsletter reminders continued to encourage staff to participate. SDF group members also offered one-on-one assessment assistance and refreshments at open sessions in three libraries, which were quite popular. Individuals who had not yet taken the assessment by the January 6, 2006, deadline were contacted by Human Resources staff and by their supervisors to encourage their participation. The rate of participation was very high, with 90% of the staff (302 individuals) completing the self-assessment by the deadline.

Solution Phase

The solution phase involves analyzing reports produced by SMART, to assess skill levels both across the organization and individually. The intention was that training staff could then utilize that information to design a training curriculum custom-designed to address specific identified gaps. New Horizons provides a variety of reports to use in analyzing SMART assessment results, ranging from high level, organizational views to complete reports on each individual. These reports very clearly demonstrate "gaps" and training needs for each skill set. New Horizons offers two views of these reports:

1. User View: Individuals can view various reports on their own assessment, and supervisors can view the reports of individuals who report directly to them.
2. Organizational View: Library administrators can view various reports that reflect either individual assessment results or multiple views of organizational results.

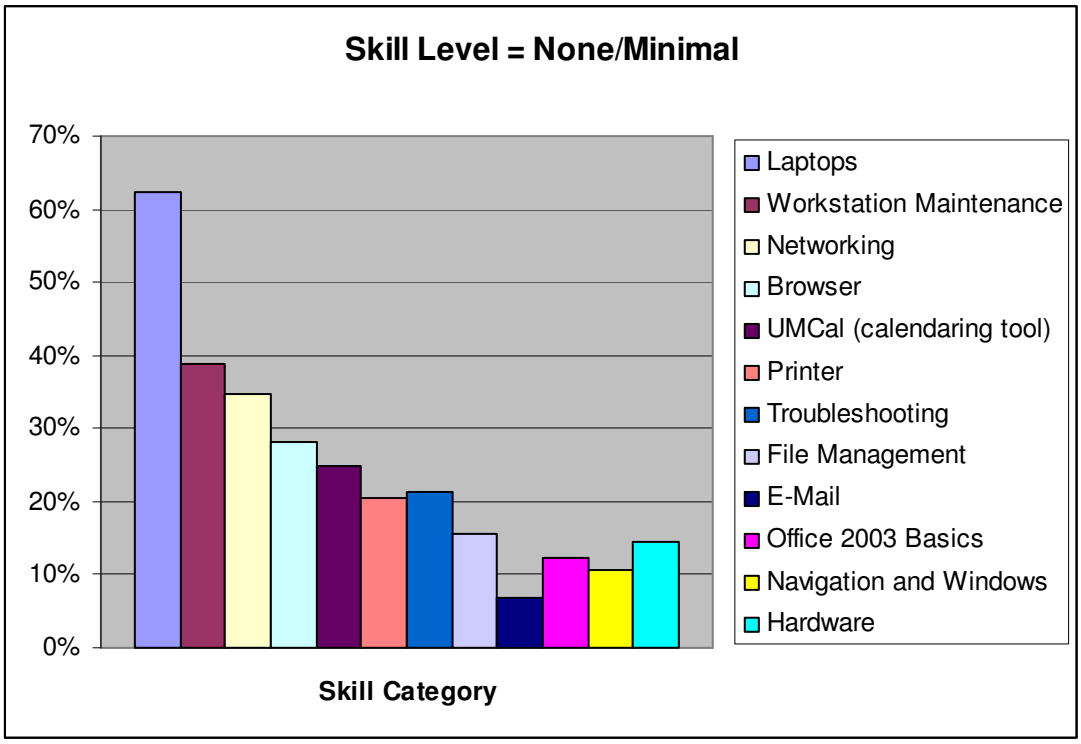
For example, Table 1 includes organizational data showing the percentage of staff in three basic skill categories of competency (None or Minimal, Aware/Limited, Competent and Above) for each broad skill topic category. This data demonstrates that the majority of staff members are comfortable with E-mail and MS Office, while few feel competent with laptops.

TABLE 1

SKILL CATEGORY	SKILL LEVEL		
	None or Minimal	Aware/Limited	Competent and Above
Laptops	62%	17%	21%
Workstation Maintenance	39%	30%	31%
Networking	35%	23%	42%
Browser	28%	29%	43%
UMCal (calendaring tool)	25%	29%	47%
Printer	21%	23%	57%
Troubleshooting	21%	19%	60%
File Management	16%	15%	69%
E-Mail	7%	23%	70%
Office 2003 Basics	12%	17%	71%
Navigation and Windows	11%	15%	74%
Hardware	15%	8%	77%

Chart 1 depicts the first column of data from Table 1, enabling training staff to easily identify areas in which staff assess their competency as "None or Minimal". This chart could easily be used to determine skill sets or areas in which to focus training efforts and resources, or conversely to determine which areas require little additional training.

CHART 1



This data has to be interpreted with an awareness of some limitations inherent in the assessment tool, and attention to the specific context in which the data will be used or interpreted. One limitation of the tool is that it does not offer "Not Applicable" as a competency option, even though that would be an appropriate choice for some individuals in some roles based on their specific situation. For example, the *Advanced Desktop* role was assigned to many staff members, some of whom own laptop computers. These individuals should be familiar and comfortable with using this piece of hardware as it is an integral part of performing their daily

work. For someone else in that same role, demonstrating a low level of competency in laptops may simply reflect the fact that the employee does not have one and is therefore not required to be competent in the use of a laptop as part of their normal work. It would be unreasonable for a supervisor to request that the latter individual obtain laptop training to remedy a perceived "gap" that is in actuality inapplicable to their job.

Next Steps

The administration of the assessment completed the scope of the SDF group's charge yet resulted in a great deal of useful data. Our final report to the administration provided examples of the various SMART reports, described what information could be gleaned from each type of report, and provided broad recommendations about how that information might be used. One recommendation was that a follow-up group or unit (e.g., Staff Development and Training) be assigned to utilize the information gleaned from this initiative to design staff development programs. Additional recommendations for using the self-assessment results are outlined below.

Personal Professional Development and Goals: Results of the online self-assessment could be shared with individuals and their supervisors during annual reviews, and used as a foundation for determining staff professional development and job performance goals for the following year. This involves the identification of which SMART reports would be most appropriate for this use, and training supervisors in the use of the reports for this purpose.

Organizational Professional Development and Training: A connection should be forged between identified training needs and the provision of a matching training curriculum. We have not addressed the curricular piece in this article. Significant efforts were undertaken to identify training opportunities offered locally and online, in multiple formats, to enable training staff to formulate a new training curriculum. This should be designed to address the most pressing staff

needs, with modular options available for individuals with multiple learning styles, and without duplicating training programs offered by the University and via local training venues.

A detailed review and analysis of the SMART assessment reports could be performed to determine staff training needs in each skill topic measured by the assessment (e.g., Word, Excel). This would enable administrative training staff to design a training curriculum that matches identified training needs with the appropriate training offerings or opportunities. The final SDF report included not only skills assessments, but assessments of various training options offered in different formats (e.g., online tutorials, hands-on sessions) by numerous vendors (e.g., Library staff, University IT, external vendors). Matching training needs or "gaps" to the most appropriate training opportunities would enable the Libraries to utilize training resources in the most cost-effective and efficient manner. This is a particularly important consideration in Libraries where priorities tend to be heavily weighted toward collections and salaries, resulting in short shrift for professional development and training opportunities.

Ongoing assessment, coordination of training efforts, identification of training needs, and the development of new training programs would be greatly enhanced via the formation of a Professional Development Collaborative comprised of representatives from across the Libraries (Academic Programs, Technical Services, Human Resources, etc.). This group could also serve as a conduit or mechanism for identifying training needs in specific areas and/or identifying potential trainers for unique or occasional training needs (e.g., Camtasia).

Professional Development and Training Program Assessment: It is important to assess whether the time and resources devoted to this process result in improved staff IT competencies and

increased effectiveness in their positions. The first step could be to perform a re-assessment of staff core IT skills after training has been provided, to evaluate effectiveness of the new training curriculum, assuming that is developed as a next step initiative.

Functional (Specific Job Role) Skills Assessment: The final list of core competencies assessed in this project defines a baseline set of IT skills that can be expected of *every staff member in every job role* and does not include some competencies that are core to specific functional areas. For instance, although HTML, Dreamweaver, and Microsoft Word, Excel, PowerPoint and Access were included in the *Advanced Desktop* role in this assessment, most individuals need only *some* of these skills in their jobs. Creating roles with every possible combination of these skills to cover every job would have resulted in an unmanageable number of roles. Therefore, to determine staff training needs for specific functions or job roles, a second phase project could be initiated to identify the specialized, library-specific skill sets (e.g., OPAC/Aleph) each person actually needs to perform their job, refine the skill sets for standard software, and perform another assessment customized to functional areas.

Summary

As the SDF group moved through the SMART assessment process, we identified a number of benefits, and a few constraints, that may be useful for other libraries or organizations to determine whether this type of process is a good option for them.

The benefits of the tool are:

- The process provides a data-driven method to identify gaps and patterns in staff IT skills.
- Organizational reports will be very useful for informing the design of an effective training curriculum that addresses specific identified staff training needs.

- Individual reports will be useful for empowering staff to increase and expand their IT skills, thus providing strong support for enhancing staff confidence and performance in their jobs.
- Individual reports will enable supervisors to identify professional development needs and opportunities for their staff.

Some constraints or drawbacks of the tool are:

- The process is very labor intensive and time consuming to set up.
- The Assessment Tool (SMART) does not distinguish between "Not Applicable" and "Does Not Possess" for a given skill (e.g., laptop use).
- Significant staff resources are required to ensure that reports are analyzed, IT needs are mapped to an appropriate training curriculum, supervisors are trained in using the reports in staff reviews, and follow-up assessments are performed.

The time and effort devoted to this initiative were significant, and it required an unusual degree of engagement by individuals across the Libraries. Although the curriculum development piece is not yet developed, it is likely that the self-assessment process alone increased staff awareness of their IT competencies, and alerted them to areas in which they might seek professional development opportunities to improve their skills and job performance. Organizations and institutions of all types are experiencing challenges in maintaining staff IT competencies today due to the fast pace of technological change. Utilizing the *New Horizons* self-assessment tool and process moved the University of Minnesota Libraries well down a path toward providing the

greatest possible support for their staff in keeping up with the increasingly complex technological environment in which we are immersed.

Appendix A: Software Installed on Staff Desktops, 2005

Standard

Operating Systems

Windows NT, 2000 and XP Professional

Connection Managers

LAN: Novell Client; Telnet: SSH and TN3270

Applications Software

Adobe Reader	QuickTime
Aleph	Real Player
CD Burning Software	Shockwave
Eudora Pro	Symantec Antivirus Software
IrfanView	UMCal
Macro Express	WinAmp
Microsoft Internet Explorer	WinZip
Microsoft Office 97	WS FTP32
PrintKey	

Optional

1. The following software is provided by IT on an "as needed" basis:

Connection Managers

- OCLC Passport (tech services and ILL staff)
- RLIN Terminal (tech services staff and bibliographers)

Applications Software

- Adaware
- Cataloger's Desktop
- CLIO
- Microsoft Publisher
- Prospero
- SpyBot

2. IT will provide appropriate support for other software upon request, but the software must be purchased by the department making the request. Some of the more common software in use by library staff is listed below.

Adobe Acrobat	FinePrint
Adobe Acrobat Distiller	Home Site
Adobe Illustrator	Microsoft Publisher
Adobe Pagemaker	PaintShop
Adobe Photoshop	PDFactory
Alternative CD Burning Software	Prospero
(e.g., Nero, EZ CD Creator)	TextBridge OCR
DataEase	Visio
Dreamweaver	Visual Studio
End Note	

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